

IN THE CLAIMS:

Each of claims 23–26 and 29–31 has been amended herein, claims 27, 28, 32, and 33 have been cancelled, and claims 34–44 have been added. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1 through 22 (Cancelled)

Claim 23 (Currently Amended) An operable gate stack, ~~stack on a silicon substrate having a dielectric layer thereover, said dielectric layer being substantially devoid of pitting, said operable gate stack~~ including a non-crystalline metallic silicide film ~~film and a dielectric cap comprising silicon nitride on said non-crystalline metallic silicide film.~~

Claim 24 (Currently Amended) An operable gate stack, ~~stack on a silicon substrate having a dielectric layer thereover, said dielectric layer being substantially devoid of pitting, said operable gate stack~~ including an amorphous metallic silicide film, wherein ~~said the~~ amorphous metallic silicide film is substantially devoid of silicon clusters, ~~and a dielectric cap comprising silicon nitride on said amorphous metallic silicide film.~~

Claim 25 (Currently Amended) An operable gate stack on a silicon substrate having a dielectric layer thereover, ~~said the~~ dielectric layer being substantially devoid of pitting, ~~said the~~ operable gate stack comprising:
a polysilicon layer disposed over ~~said the~~ dielectric layer;
a non-crystalline metallic silicide film disposed over ~~said the~~ polysilicon layer; and
a dielectric cap ~~comprising silicon nitride on said the~~ non-crystalline metallic silicide film.

Claim 26 (Currently Amended) A gate stack structure comprising an operable gate stack on a dielectric layer, over a silicon substrate, wherein ~~said the~~ dielectric layer is substantially devoid of pitting, ~~said the~~ operable gate stack comprising a-an amorphous metallic silicide film and a dielectric cap comprising silicon nitride on said metallic silicide film which is substantially devoid of silicon clusters.

Claims 27 and 28 (Cancelled)

Claim 29 (Currently Amended) A semiconductor device, comprising at least one operable gate stack ~~formed on a silicon substrate having a dielectric layer thereover, said dielectric layer being substantially devoid of pitting, said at least one gate stack comprising~~including a non-crystalline metallic silicide film ~~and a dielectric cap comprising silicon nitride on said non-crystalline metallic silicide film.~~

Claim 30 (Currently Amended) The semiconductor device of claim 29, wherein ~~said the~~ at least one operable gate stack further ~~comprises~~includes a silicon substrate having a dielectric layer thereover, the dielectric layer being substantially devoid of pitting, and a polysilicon layer disposed over ~~said the~~ dielectric layer, ~~said wherein the~~ non-crystalline metallic silicide film being is disposed over ~~said the~~ polysilicon layer.

Claims 31 (Currently Amended) A semiconductor device, comprising at least one operable gate stack structure on a dielectric layer, over a silicon substrate, wherein ~~said the~~ dielectric layer is substantially devoid of pitting, ~~said the~~ at least one operable gate stack structure ~~comprising a~~including an amorphous metallic silicide film and a dielectric cap comprising silicon nitride on said metallic silicide film which is substantially devoid of silicon clusters.

Claims 32 and 33 (Cancelled)

Claim 34 (New) The operable gate stack of claim 23, wherein the operable gate stack is formed on a silicon substrate having a dielectric layer thereover, the dielectric layer being substantially devoid of pitting.

Claim 35 (New) The operable gate stack of claim 34, further comprising a dielectric cap on the non-crystalline metallic silicide film.

Claim 36 (New) The operable gate stack of claim 35, wherein the dielectric cap comprises at least one of silicon nitride and silicon dioxide.

Claim 37 (New) The operable gate stack of claim 24, wherein the operable gate stack is formed on a silicon substrate having a dielectric layer thereover, the dielectric layer being substantially devoid of pitting.

Claim 38 (New) The operable gate stack of claim 37, further comprising a dielectric cap on the amorphous metallic silicide film.

Claim 39 (New) The operable gate stack of claim 38, wherein the dielectric cap comprises at least one of silicon nitride and silicon dioxide.

Claim 40 (New) The operable gate stack of claim 25, wherein the dielectric cap comprises at least one of silicon nitride and silicon dioxide.

Claim 41 (New) The operable gate stack of claim 26, further comprising a dielectric cap on the amorphous metallic silicide film.

Claim 42 (New) The operable gate stack of claim 43, wherein the dielectric cap comprises at least one of silicon nitride and silicon dioxide.

Claim 43 (New) The semiconductor device of claim 29, wherein the at least one operable gate stack further comprises a dielectric cap on the non-crystalline metallic silicide film.

Claim 44 (New) The semiconductor device of claim 43, wherein the dielectric cap comprises at least one of silicon nitride and silicon dioxide.